

### Utah Education Policy Center

### **Chronic Absenteeism in Utah**



THE UNIVERSITY OF UTAH

UTAH EDUCATION POLICY CENTER

Bridging Research, Policy, and Practice

1901 E. South Campus Drive Salt Lake City, Utah 84112 http://uepc.ed.utah.edu/



### Chronic Absenteeism in Utah

### Our research addressed three questions:

- Who were the chronically absent students?
- What were the short-term academic correlates of chronic absenteeism?
- What were the long-term academic correlates of chronic absenteeism?



### Data Sets:

The Cross-sectional data set included 587,402 K-12 students who were enrolled in a Utah public school during the 2010-2011 school year

The Longitudinal data set followed a cohort of 39,141 students enrolled in the 8th grade in 2006. Data was included for every year from 2006 until the students graduated in 2010, transferred out of Utah public schools, or dropped out.

This report uses data made available through a Data Share Agreement between the USOE and the UEPC. In addition, the UEPC maintains access to data as a member of the Utah Data Alliance, a partnership of the Utah State Office of Education, the Utah System of Higher Education, the Utah College of Applied Technology, the Utah Department of Workforce Services, the Utah Education Policy Center, and the Utah Education Network. The views expressed are those of the authors and not necessarily the USOE or the Utah Data Alliance partners.



# Who were the chronically absent students?

To answer this question we considered:

- Demographic characteristics that predicted chronic absenteeism
- Demographic characteristics that co-occurred with chronic absenteeism
- The profile of chronically absent students



### Grade in school was a significant predictor of Chronic Absenteeism

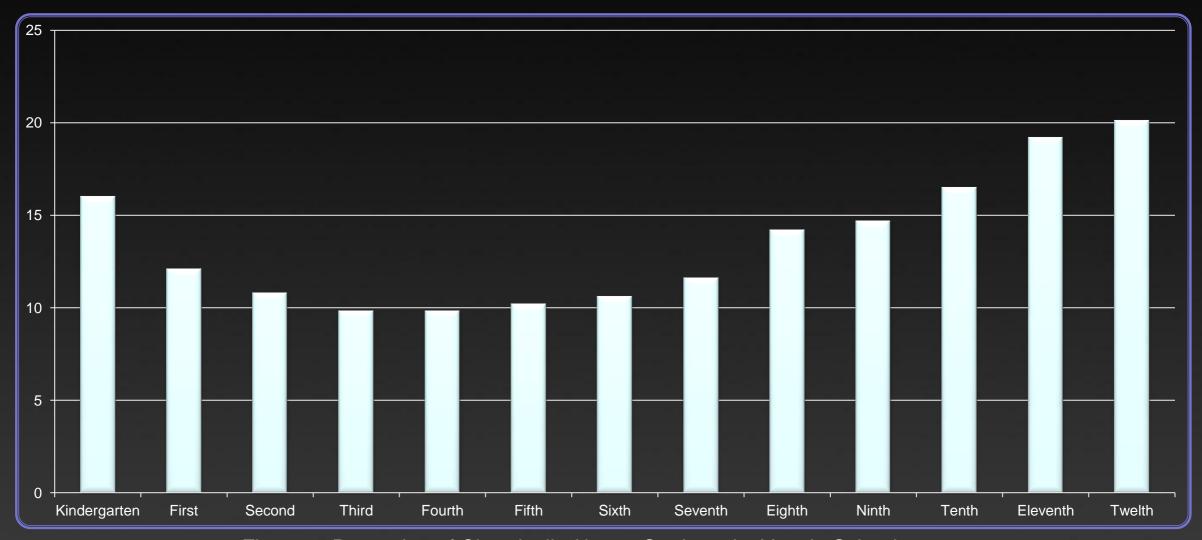


Figure 1. Proportion of Chronically Absent Students by Year in School

The grade of the student was related to chronic absenteeism. The general U-shaped trend is typical of what is seen in other states.



# Student Demographics Significantly Predicted Chronic Absenteeism

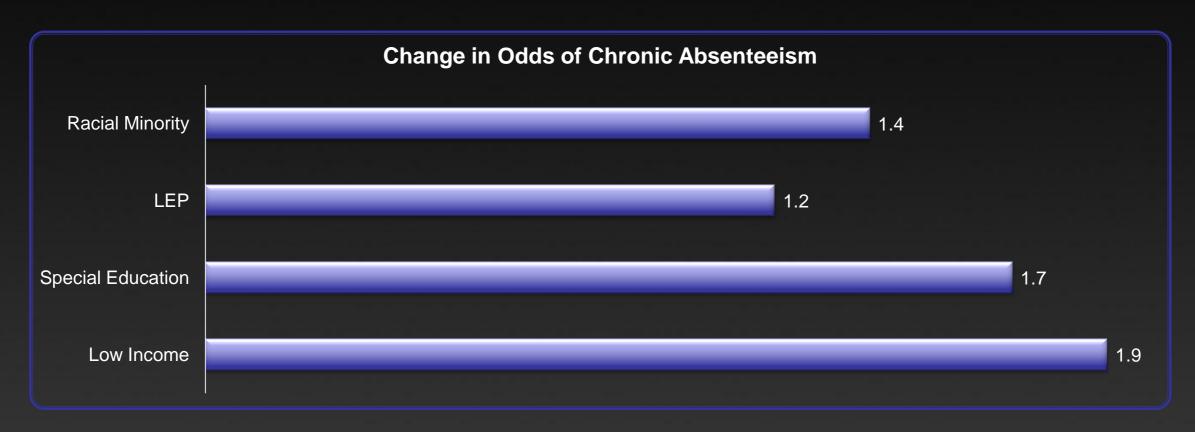


Figure 2. Increased Odds of Chronic Absence Given Membership in a Predictor Group

#### Simple regression (one predictor per analysis) showed:

- students from non-white ethnic groups to be 40% more likely to be chronically absent,
- students with low English proficiency to be 20% more likely to be chronically absent,
  - students with special needs to be 70% more likely to be chronically absent, and
  - students from low income homes to be 90% more likely to be chronically absent.



# Student Demographics also Predicted Chronic Absenteeism with other Variables Controlled

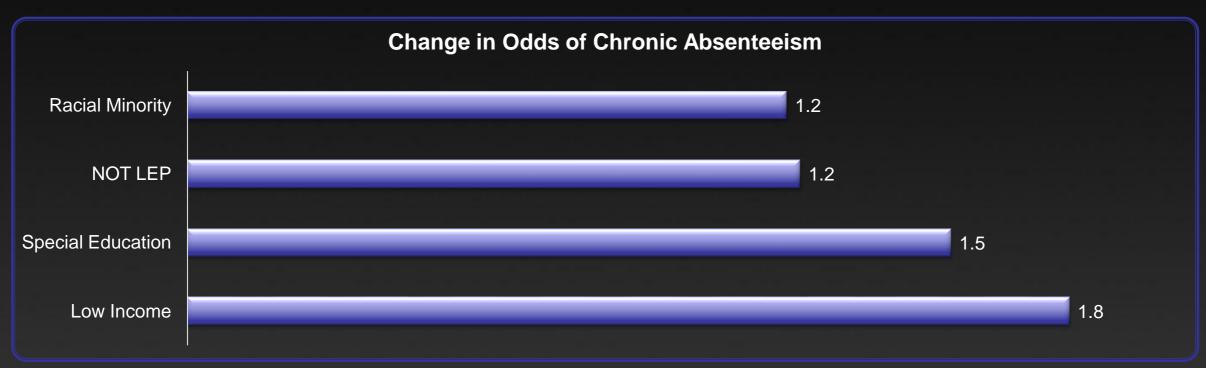


Figure 3. Increased Odds of Chronic Absence Given Membership in a Predictor Group and No Membership in Other Predictor Groups

Multiple regression showed that, with other variables controlled:

- students who were racial minority were 20% more likely to be chronically absent,
  - students who were <u>NOT LEP</u> were 23% more likely to be chronically absent,
- students who were in special education were 53% more likely to be chronically absent, and
  - students from low income homes were 77% more likely to be chronically absent.



## School Year Covariates of Chronic Absenteeism



Figure 4. Change in Odds Associated with the Covariates of Mobility and Homelessness

Students who were homeless were 2.5 times more likely to be chronically absent than students who weren't homeless and students who checked out of one school and into another during the year were 4.2 times more likely to be chronically absent.



# Homelessness and Chronic Absenteeism

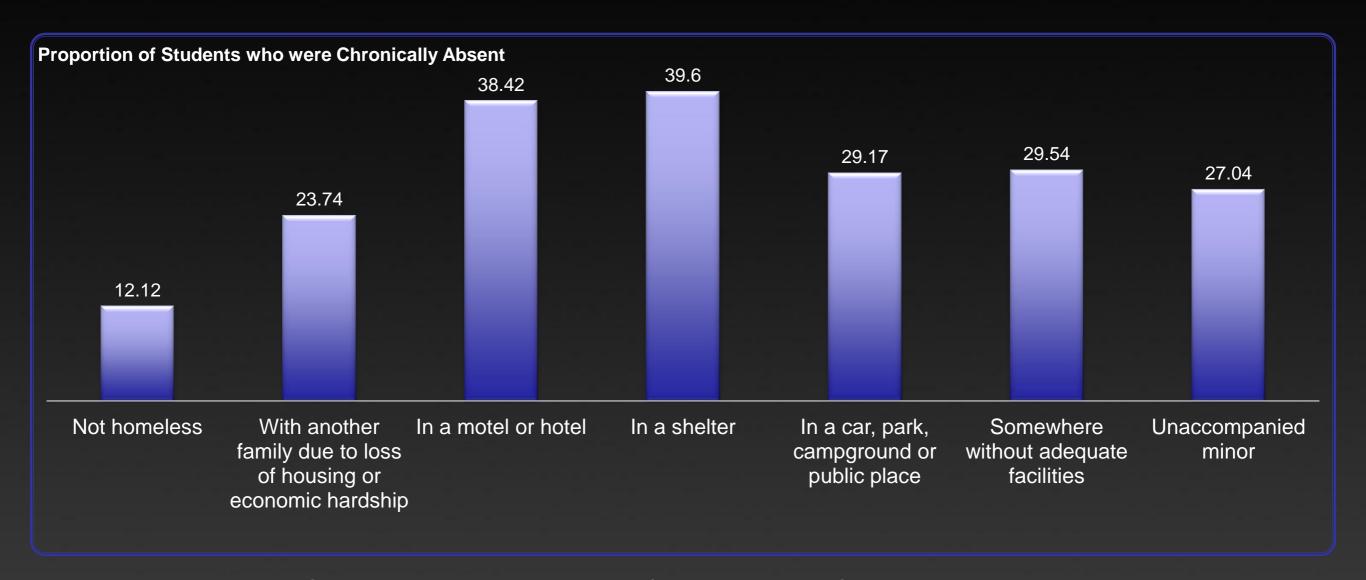


Figure 5. Proportion of Students from Each Homelessness Category who were Chronically Absent

This graph shows that students in shelters or living in motels had extremely high incidence of chronic absenteeism.



Absent Students

With the exception of students from low-income homes, majority groups (i.e., students who were white, English proficient, non-mobile, and not receiving special education services) represented the majority of chronically absent students.

#### **Abenteeism Profile**

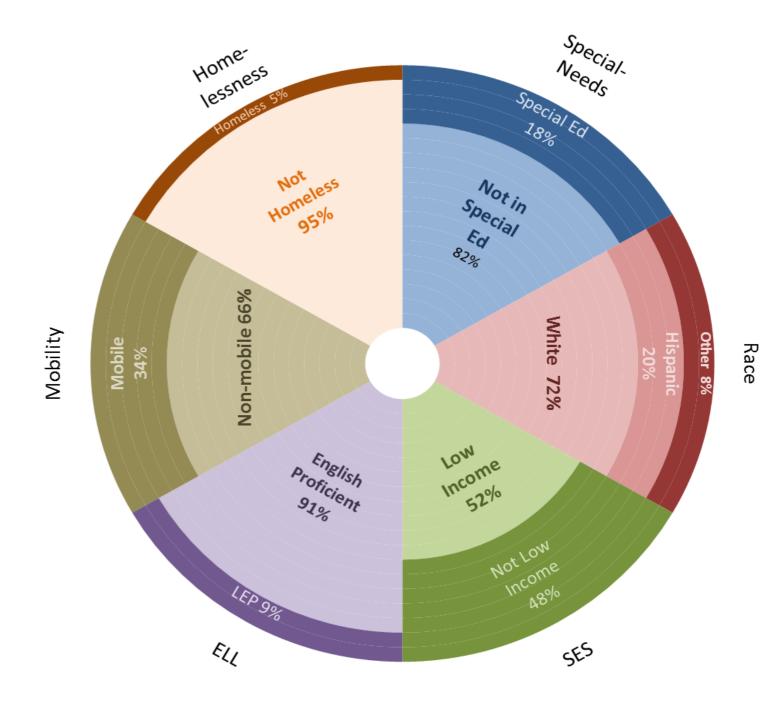


Figure 6. Percentage of Chronically Absent Students from Different Demographic Categories



## Short-Term Academic Correlates of Chronic Absenteeism

Students who were chronically absent had lower test scores and grades than students who were not chronically absent

Outcome	Average Academic outcomes of			
	Chronically Absent Students			
Reading on	Odds of being below grade level were 1.7 times			
grade level	higher			
CRT Language	Lower by 3.798 points			
CRT Math	Lower by 5.861 points			
CRT Science	Lower by 4.850 points			
Cumulative GPA	Lower by .854 points			

Table 1. Relationship between Chronic Absenteeism and Academic Outcome Variables



# Long-Term Academic Correlates of Chronic Absenteeism

Being Chronically Absent in Grade	Odds of Being Chronically Absent in Grade 9	Odds of Being Chronically Absent in Grade 10	Odds of Being Chronically Absent in Grade 11	Odds of Being Chronically Absent in Grade 12
8	17.3 times			
9		13.3 times		
10			12.6 times	
11				8.1 times

Table 2. The Increase in Odds of Being Chronically Absent in One Grade, Given Chronic Absenteeism in the Previous Grade

On average, being chronically absent in one grade increased the odds of being chronically absent in the next grade by nearly thirteen times



# Chronically absent student were more likely to dropout than non-chronically absent students

Students who were chronically absent in any year, starting with the 8<sup>th</sup> grade year, were 7.4 times more likely to dropout.

Students who were chronically absent in any year prior to the year they dropped out were 5.5 times more likely to drop out.



More than 25 percent of the seniors who had been chronically absent at some point between their 8<sup>th</sup> grade and junior year dropped out.



# Increased Odds of Dropping Out if a Student was Absent in Only One Year

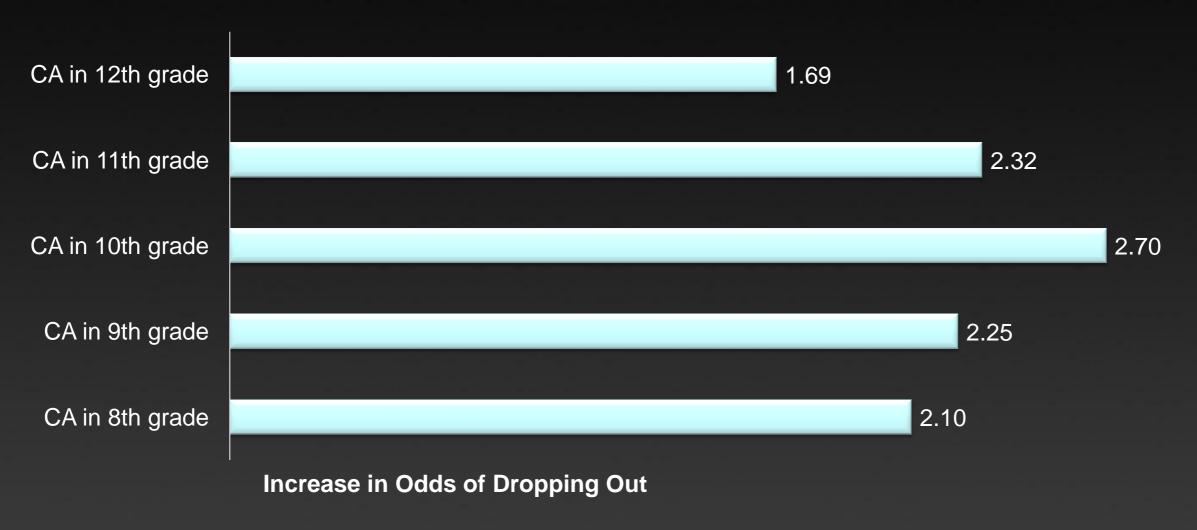


Figure 7. The Change in Odds of Dropping Out Associated with Chronic Absenteeism in Each School Year

Students who were chronically absent in one and only one year between 8<sup>th</sup> and 12<sup>th</sup> grade were twice as likely, on average, to drop out.



# Cumulative Influence of Chronic Absence on Dropping Out

Number of Years Chronically Absent	Percent of Students Who Dropped Out	
0	10.3%	
1	36.4%	
2	51.8%	
3	58.7%	
4	61.3%	
5	Not Reported (<1%)	

Table 3. Proportion of Students Dropping Out by Number of Years the Student was Chronically Absent

Each year of chronic absenteeism increased the chance that a student would drop out. Student chronically absent two or more years were more likely to dropout than they were to graduate.



# The Relationship between Chronic Absence, GPA, and Dropout

Approximately 70% of the relationship between Chronic Absenteeism and dropout can be explained as being mediated by GPA.

30% of the relationship between Chronic Absence and Dropout is independent of student grades.

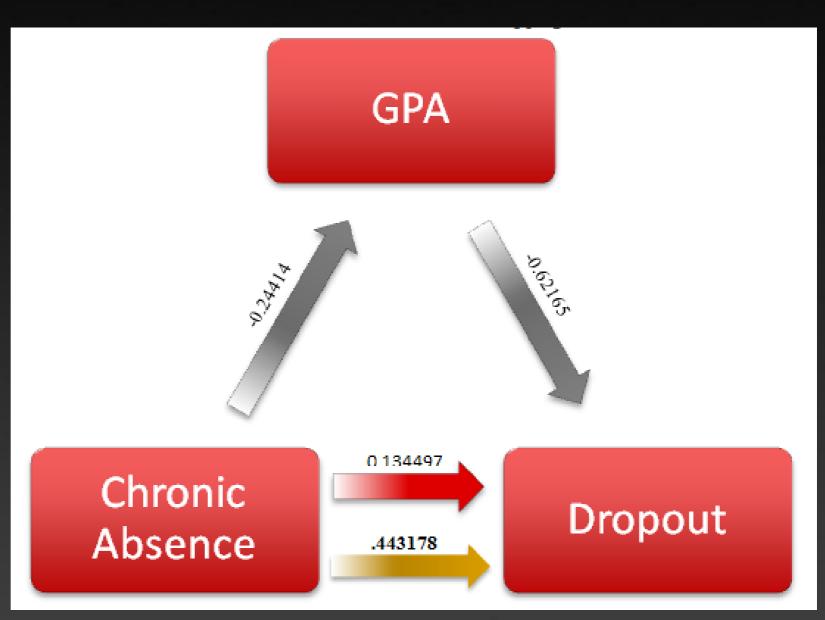


Figure 8. Direct and Indirect Effects of Chronic Absenteeism on Dropping Out



### Using Chronic Absenteeism and GPA to Predict Dropout

Predictors Used	Demographic model	Model 1	Model 2	Model 3
Chronic Absence		X	X	X
GPA			X	x
Demographics	X			X
Percent of Dropouts Correctly Identified	6.80%	20.60%	59.40%	54.60%

**Table 4. Percent of Dropouts Identified Through Four Different Models.** 

Four models were used to predict student dropout from demographic and academic factors. Using only demographic factors, 6.8% of students were correctly identified as likely to dropout. Using only chronic absence, 20.6% of dropouts were identified. The most proficient model used chronic absenteeism and GPA and was able to predict nearly 60% of dropouts.



### Conclusions from Report

- Chronic absenteeism in Utah is pervasive, with approximately 1 out of 7 students chronically absent every year
- Chronically absenteeism is associated with low test scores, low grades, and low graduation rates
- Chronic absenteeism serves as an early warning sign of future academic problems, therefore, <u>early identification</u> of chronically absent students is essential.



### Future Research Questions

- If and to what extent attendance policies are correlated with attendance?
- What is the relationship between chronic absenteeism and ACT scores?
- What are the long-term outcomes of chronic absenteeism for "good" students (GPAs > 3.0)?





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